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| 1. Component NSA/CSS                | FY 200 | FY 2005 MILITARY CONSTRUCTION PROJECT DATA |                                     |            |                |
|-------------------------------------|--------|--|-------------------------------------|------------|----------------|
| Defense                             |        |  |                                     |            | FEB 2004       |
| 3. INSTALLATION AND LOCATION        |        |  | 4. PROJECT TITLE                    |            |                |
| NSA, Fort George G. Meade, Maryland |        |  | Reconfigure Chilled Water, Phase II |            |                |
| 5 PROGRAM ELEM                      | MENT   | 6. CATEGORY CODE                           | 7. PROJECT NUMBER                   | 8. PROJECT | T COST (\$000) |
| NFIP 0301                           | 1011G  | 82700                                      |                                     |            | 3,417          |

| a  | COST | ESTIMATES |  |
|----|------|-----------|--|
| 7. | COSI | LOTIMATES |  |

| 9. COST EST                                 | TIMATES |          |           |              |
|---|---------|----------|-----------|--------------|
| ITEM  | U/M     | QUANTITY | UNIT COST | COST (\$000) |
| PRIMARY FACILITY                            |         |          |           |              |
| Chilled Water Distribution Modifications    | LS      |          |           | 3079         |
| SUPPORTING FACILITIES                       |         |          |           | -0-          |
|   |         |          |           |              |
| ESTIMATED CONTRACT COST                     |         |          |           |              |
| CONTINGENCY PERCENT (5.00%)                 |         |          |           | 3079         |
| SUBTOTAL                                    |         |          |           | <u>154</u>   |
|   |         |          |           | 3233         |
| SUPV, INSP, & OVERHEAD (5.70%)              |         |          |           |              |
| TOTAL REQUEST                               |         |          |           | <u>184</u>   |
| TOTAL REQUEST (ROUNDED)                     |         |          |           | 3417         |
| DIGENTIED EQUIDATENTE OFFIED ADDRODDIATIONS |         |          |           | 3400         |
| INSTALLED EQUIPMENT – OTHER APPROPRIATIONS  |         |          |           | -0-          |
|   |         |          |           | -0-          |
|   |         |          |           |              |
|   |         |          |           |              |
|   |         |          |           |              |
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|   |         |          |           |              |
|   |         |          |           |              |

## DESCRIPTION OF PROPOSED CONSTRUCTION

This project will provide piping, valves, chillers, pumps and associated components required to effectively direct chilled water to mission critical operational equipment. The automated controls will be connected to the Facilities Control Center (FCC), which will serve as the central control point for the chilled water distribution system. This initiative will have all of the necessary components and connectivity required to be operative from the FCC. (U)

11. REQ: N/A Adequate: N/A Substandard: N/A

PROJECT: Construct Chilled Water distribution modifications throughout the OPS1, OPS2A, OPS2B, and Headquarters buildings at NSA, Fort Meade, Md. (Current Mission)

| 1. Component                        | FY 2003 MILITARY CONSTRUCTION PROJECT D | ) A T A  | 2. Date     |  |  |
|-------------------------------------|---|----------|-------------|--|--|
| NSA/CSS<br>Defense                  | NSA/CSS                                 |          | FEB 2004    |  |  |
| 3. INSTALLATION AND LOCATION        |   |          |             |  |  |
| NSA, Fort George G. Meade, Maryland |   |          |             |  |  |
| 4. PROJECT TITLE 5. PR              |   | 5. PROJE | JECT NUMBER |  |  |
| Reconfigure Ch                      | illed Water, Phase II                   |          |             |  |  |

# 11. REQUIREMENT (con't):

This project is identified in our Reliability Plan for Critical Mission Systems as essential to provide an up-to-date, fully functional, flexible, automated and redundant chilled water distribution system. This project is consistent with our Chilled Water Architecture Plan that outlines our current, near term and long-range plans for our chilled water system. This initiative is required to increase the reliability/availability of the chilled water system that supports critical mission operational equipment in the "Big Four" (OPS1, OPS2A, OPS2B, and HQS) buildings. This project will increase chilled water reliability by providing alternate paths, redundant water sources and the necessary automation to quickly and remotely control the chilled water system that support mission critical operational systems by establishing a building level, common distribution system for the chilled water in the "Big Four".

### **CURRENT SITUATION:**

The existing Chilled Water System has been modified and extended to the point that it far exceeds its designed capabilities. The System is very completed antiquated, non-flexible manually operated and incapable of systematic future expansion. The system is key to operations for critical mission systems.

### **IMPACT IF NOT PROVIDED:**

There exist several single points of failure in the existing chilled water system, which could severely limit the ability to produce and deliver chilled water to mission critical operational equipment. (U)

#### ADDITIONAL:

Related Projects/Systems: N/A.

Alternate methods of meeting this requirement have been explored during project development. This project is the only feasible option to meet the requirement. A parametric cost estimate based on project engineering design was used to develop this budget estimate.

| 1. Component                   | FV 2005 MII ITAD                     | Y CONSTRUCTION              | N PROJECT DATA       | 3. Date          |  |  |
|--------------------------------|--------------------------------------|-----------------------------|----------------------|------------------|--|--|
| NSA/CSS                        | r i 2005 Millitan                    | I CONSTRUCTION              | N FROJECI DATA       | EED 2004         |  |  |
| Defense                        |                                      |                             |                      | FEB 2004         |  |  |
| 4. INSTALLATIO                 | N AND LOCATION                       |                             |                      |                  |  |  |
| NSA, Fort Georg                | ge G. Meade, Maryland                |                             |                      |                  |  |  |
| 4. PROJECT TITLE               |                                      |                             | 6. PRO               | DJECT NUMBER     |  |  |
| Reconfigure Chi                | lled Water, Phase II                 |                             |                      |                  |  |  |
| 12. SUPPLEMEN                  | NTAL DATA                            |                             |                      |                  |  |  |
| A. Estimated D                 | esign Data                           |                             |                      |                  |  |  |
| 1. Status                      |                                      |                             |                      |                  |  |  |
| a. Dat                         | e Design Started                     |                             |                      | APR 2004         |  |  |
| b. Pero                        | cent Completed as of January 1,      | , 2004                      |                      | 0%               |  |  |
| c. Date                        | e 35 % Design Completed              |                             |                      | AUG 2004         |  |  |
| d. Date Design Completed       |                                      |                             |                      | NOV 2004         |  |  |
| e. Typ                         | e of Design Contract                 |                             | I                    | Design-Bid-Build |  |  |
| 2. BASIS                       |                                      |                             |                      |                  |  |  |
| a. Sta                         | andard or Definite Design            | Yes                         | NoX                  |                  |  |  |
| b. W                           | here Design Was Most Recent          | ly Used                     | N/A                  |                  |  |  |
|                                |                                      |                             |                      |                  |  |  |
| 3. COST (\$000)                | = c = a + b = d + e                  |                             | 308                  |                  |  |  |
| a Pr                           | oduction of Plans and Specific       | ations                      | 205                  |                  |  |  |
|                                | ll Other Design Costs                |                             | 103                  |                  |  |  |
|                                | c. Total                             |                             |                      |                  |  |  |
|                                | ontract                              |                             | 308<br>308           |                  |  |  |
|                                | -house                               |                             | 0                    |                  |  |  |
|                                |                                      |                             |                      |                  |  |  |
|                                | TON CONTRACT AWARD                   |                             | FEB 2005             |                  |  |  |
| 5. CONSTRUCTION START MAR 2005 |                                      |                             |                      |                  |  |  |
| 6. CONSTRUCT                   | ION COMPLETE                         |                             | MAR 2006             |                  |  |  |
| B. EQUIPMEN<br>APPROPRIA       | IT ASSOCIATED WITH THIS I<br>ATIONS: |                             | BE PROVIDED FROM OTH | ER               |  |  |
| Equipment                      | Procuring                            | Fiscal Year<br>Appropriated | Cost                 |                  |  |  |
|                                | <u>Appropriation</u>                 | or Requested                | <u>(\$000)</u>       |                  |  |  |
| <u>Nomenclature</u>            | Appropriation                        |                             |                      |                  |  |  |
| Nomenclature N/A               | <u> Арргорпацон</u>                  | -                           |                      |                  |  |  |

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